



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,159	07/17/2003	Thomas R. Headley	010355-9137	1908
23409	7590	04/06/2005	EXAMINER	
MICHAEL BEST & FRIEDRICH, LLP 100 E WISCONSIN AVENUE MILWAUKEE, WI 53202			HEWITT, JAMES M	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,159

Applicant(s)

HEADLEY, THOMAS R.

Examiner

James M Hewitt

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-18,20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-18,20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/18/05 has been entered.

Drawings

The drawings are objected to because in Figures 5, 6 and 9, the cross-hatching for the insert should be cross-hatching that corresponds to plastic. See MPEP 608.02. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the

remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1-3, 5-18 and 20-21 are objected to because of the following informalities:

In claim 1 lines 8-9, the phrase "at least one aperture defined by the at least one insert through the wall thickness" is confusing. In claim 1 line 9, the Examiner suggests replacing the phrase "insert through the wall thickness" with --insert, said at least one insert being situated within the wall--. And In claim 1 line 7, "thickness" should be deleted.

In claim 16 lines 6-7, the phrase "an aperture though the wall thickness of the manifold upon incorporating the insert therein" is confusing. In claim 16 lines 6-7, the Examiner suggests replacing phrase "an aperture though the wall thickness of the manifold upon incorporating the insert therein" with --one of said plurality of flow openings of the manifold--. And in claim 16 line 2, "thickness" should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-9, 12-13, 16 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Confer et al (US 3,742,995) in view of Jones (US 4,664,958), and further in view of Boaz et al (US 6,022,504).

With respect to claims 1 and 12, Confer et al Jones discloses a method of manufacturing a flow connector, comprising: providing at least one insert (20), the insert having a threaded bore (19) for attachment to a threaded flow conduit (see at least col. 1 lines 12-17), and molding onto the at least one insert a composition comprising at least one polymer (thermoplastic) to form a manifold having a wall thickness defining an internal cavity and comprising a plurality of flow openings comprising at least one aperture defined by the at least one insert through the wall thickness. Confer et al fails to teach that the insert is polymeric and comprises a reinforcement material selected from the group consisting of fiberglass, an inert material and combinations thereof. Confer et al rather discloses that his inserts are metal. Jones, however, in col. 2 lines 6-20, teaches a similar device having a flow opening and utilizing an insert that may be either a polymer or a metal. In view of Jones' teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a polymeric insert instead of a metal insert in Confer et al in order to provide a greater

margin of safety against leakage (see Jones, col. 2 lines 18-20). Boaz et al teaches an insert that may be made from glass-filled nylon or glass-filled polypropylene. In view of Boaz et al's teaching and that Jones states that his insert could be about any material (see Jones, col. 2 ll. 7-10), it would have been obvious to one having ordinary skill in the art at the time the invention was made to form Confer et al's insert from glass-filled nylon or glass-filled polypropylene, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

With respect to claim 2, wherein the at least one polymer of the at least one insert is the same as the at least one polymer of the flow connector. Refer to col. 2 lines 7-20 in Jones.

With respect to claim 3, wherein the at least one polymer of the at least one insert and the at least one polymer of the flow connector are similar polymers that permit remelting and subsequent bonding at the interface between the at least one insert and the flow connector. Refer to col. 2 lines 7-20 in Jones.

With respect to claim 5, it should be understood that the glass fibers would be uniformly dispersed throughout the plastic, and thus would be oriented circumferentially about the insert.

With respect to claims 6 and 13, Confer et al's device is a manifold body. Regarding the limitation "for a fluid handling pump", it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed

does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

With respect to claims 7 and 21, wherein the at least one aperture is one of an inlet and an outlet opening in the manifold body.

With respect to claim 8, Confer et al employs blow-molding to form his device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to instead form the device by injection-molding since injection-molding is commonly known and practiced.

With respect to claim 9, Confer et al employs core pin inside the mold. This is also a common practice.

With respect to claim 16, refer to the above rejection of claim 1.

With respect to claim 20, it should be understood that the glass fibers would be uniformly dispersed throughout the plastic, and thus would be oriented circumferentially about the insert.

Claims 10-11, 14-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Confer et al (US 3,742,995) in view of Jones (US 4,664,958), and further in view of Boaz et al (US 6,022,504) as applied above, and still further in view of Yoshida et al (US 6,517,761).

With respect to claims 10-11, 14-15 and 17-18, Confer et al fails to teach that his insert includes circumferential grooves or spurs located on an exterior surface of the insert. Confer et al however does teach forming an annular groove and an outwardly

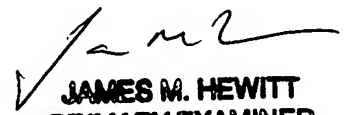
extending flange on the exterior surface of the insert to assist in securing the insert. Yoshida teaches an insert for embedding in a base made of thermoplastic resin. The insert includes circumferential grooves and/or spurs on the exterior surface thereof for securing the insert in the base. In view of Yoshida's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Confer et al with circumferential grooves or spurs on the outer surface of his insert in order to better retain and secure the insert within the wall of the drum.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hewitt whose telephone number is 703-305-0552. The examiner can normally be reached on M-F, 930am-600pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 703-308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JAMES M. HEWITT
PRIMARY EXAMINER